



SafeSite® LED Area Light - IECEx / ATEX
for Indoor and Outdoor Hazardous Areas



Patent Pending

SafeSite® LED Area Light - ATEX / IECEx for Indoor and Outdoor Hazardous Areas



About Dialight

Dialight (LSE: DIA.L) is leading the energy efficient LED lighting revolution around the world for industrial and hazardous areas as well as transportation and infrastructure applications. For 40 years it has been committed to the development of LED lighting solutions that enable organisations to vastly reduce energy use and maintenance needs, improve safety, ease disposal and reduce CO₂ emissions.

Value Proposition

- Improve safety, colour quality
- Better temperature rating (T-rating)
- Lower total cost of ownership, quick ROI
- Lower energy consumption by > 50%
- Significantly reduce CO₂ emissions

History at a Glance

- 1938 → Dialight founded in Brooklyn, NY
- 1971 → LED circuit board indicator
- 1994 → LED transit vehicle signals
- 1995 → LED traffic signals
- 2000 → FAA certified LED Obstruction Lights
- 2007 → LED lighting for hazardous locations
- 2009 → LED High Bay fixtures
- 2012 → Full performance 10-year warranty
- 2013 → Controls for LED Lighting
- 2014 → 125 lumens per watt
- 2015 → 140 lumens per watt

SafeSite®

- LED lighting for hazardous locations

Vigilant®

- LED lighting for general Industrial locations

DuroSite®

- LED lighting for general Industrial locations

Vertically Focused

Regulated Primary Markets

- Oil, Gas & Petrochemical
- Power Generation
- Mining
- Chemical
- Pharmaceutical
- Water Treatment
- Food & Beverage

Secondary Markets

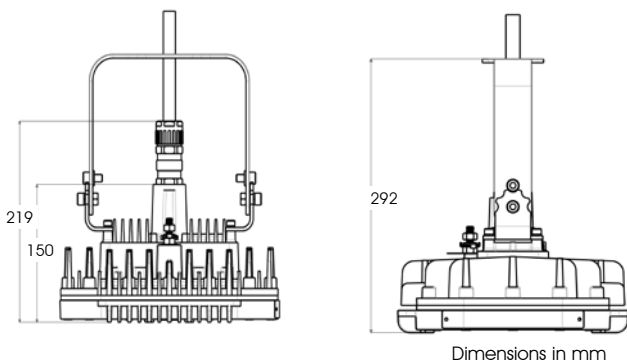
- Manufacturing
- Warehousing
- Cold Storage
- Data Centers





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SafeSite® LED Area Light - IECEx / ATEX Zone 1, 21



Certifications

- Ex II 2GD Ex d IIC T4 Gb (Ta = -40°C to +65°C)
- Ex † IIC T135°C Db IP 6X (Ta = -40°C to +65°C)
- Ex II 2GD Ex d IIC T5 Gb (Ta = -40°C to +42°C)
- Ex † IIC T100°C Db IP 6X (Ta = -40°C to +42°C)
- Certificate numbers: IECEx SIR 11.0156
SIRA 11ATEX1357
- ATEX Zones 1, 21
- ATEX Zones 2, 22
- ABS Design Assessed: 13-HS1043210C-PDA
- IP66
- RoHS compliant
- IK08 impact rating

Features & Benefits

- L70 rated for >100,000 hours @ 25°C ambient
- 5 year full performance warranty
- Instant on/off operation
- Universal input (110-277V AC), 50/60Hz
- Superior colour rendering index compared to HPS, LPS, MV
- Mercury free
- Resistant to shock and vibration
- Temperature compensation technology for longer life
- Factory sealed

Application:

The SafeSite® LED area light represents the future of energy efficient facility illumination for hazardous areas worldwide. The ATEX / IECEx area lighting fixture consumes at least 50% less energy compared to traditional HID light sources, while reducing maintenance and carbon emissions. This light incorporates both cutting edge LED technology along with proprietary optics to achieve area lighting comparable with other traditional light sources.

Mechanical Information

Fixture Weight:	9.53kg (21lb)
Shipping Weight:	10.43kg (23lb)
Mounting:	Supplied with stirrup mounting bracket
Wiring:	Factory installed 3 meter 3 core armored cable

Electrical specifications

Operating Voltage:	110-277V AC, 50/60 Hz
Power Consumption:	See table
Operating Temp:	-40°C to +65°C (-40°F to +149°F)
Surge Protection:	1 kV line to line 2 kV line to ground
THD:	<20%
Power Factor:	> 0.9

Construction

Housing:	Copper free aluminum (A360)
Finish:	Superior dual coat finish Sealed polyester topcoat Chemical-resistant epoxy primer
Lens:	Toughened glass

Photometric Information

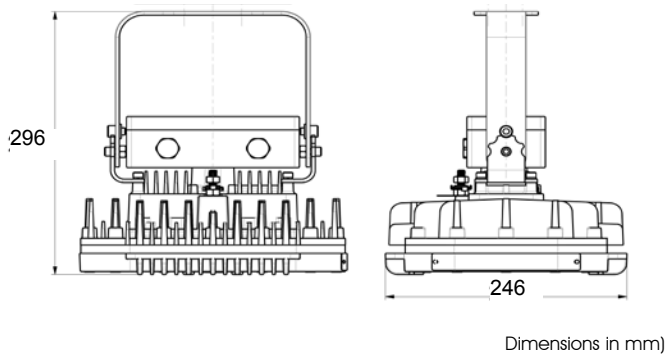
CRI:	75
CCT:	5000K (cool white) 4000K (neutral white)
Optics:	180° distribution 360° distribution
IES Files:	available at www.dialight.com

All values typical unless otherwise stated
All lumen values are typical (tolerance +/- 10%)



Patent Pending

SafeSite® LED Area Light - IECEx / ATEX Junction Box - Zone 1, 21



Certifications

- Ex II 2GD Ex d IIC T4 Gb (Ta = -20°C to +65°C)
- Ex II 2GD Ex d IIC T5 Gb (Ta = -20°C to +42°C)
- Ex t IIC T135°C Db IP 6X (Ta = -20°C to +65°C)
- Ex t IIC T100°C Db IP 6X (Ta = -20°C to +42°C)
- -40°C variants available for all the above
- Certificate numbers: IECEx SIR 11.0156
SIRA 11ATEX1357
- ATEX Zones 1, 21
- ATEX Zones 2, 22
- IP66
- RoHS compliant
- IK08 impact rating

Features & Benefits

- L70 rated for >100,000 hours @ 25°C ambient
- 5 year full performance warranty
- Instant on/off operation
- Universal input (110-277V AC), 50/60Hz
- Superior colour rendition index compared to HPS, LPS, MV
- Mercury free
- Resistant to shock and vibration
- Temperature compensation technology for longer life
- Factory sealed

Application:

The SafeSite® LED area light represents the future of energy efficient facility illumination for hazardous areas worldwide. The ATEX /IECEx area lighting fixture consumes at least 50% less energy compared to traditional HID light sources, while reducing maintenance and carbon emissions. This light incorporates both cutting edge LED technology along with proprietary optics to achieve area lighting comparable with other traditional light sources.

Mechanical Information

Fixture Weight:	9.07kg (20lb)
Shipping Weight:	9.98kg (22lb)
Mounting:	Supplied with stirrup mounting bracket
Wiring:	Factory installed junction box

Electrical specifications

Operating Voltage:	110-277V AC, 50/60 Hz
Power Consumption:	See table
Operating Temp:	-40°C to +65°C (-40°F to +149°F)
Surge Protection:	1 kV line to line 2 kV line to ground
THD:	<20%
Power Factor:	> 0.9

Construction

Housing:	Copper free aluminum (A360)
Finish:	Superior dual coat finish Sealed polyester topcoat Chemical-resistant epoxy primer
Lens:	Toughened glass

Photometric Information

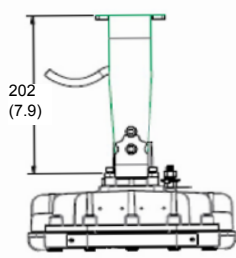
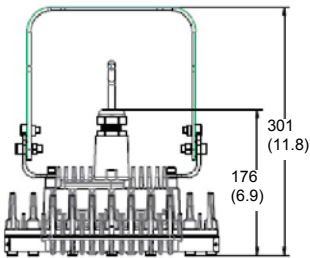
CRI:	75
CCT:	5000K (cool white) 4000K (neutral white)
Optics:	180° distribution 360° distribution
IES Files:	available at www.dialight.com

All values typical unless otherwise stated
All lumen values are typical (tolerance +/- 10%)



Patent Pending

SafeSite® LED Area Light - IECEx / ATEX Zone 2, 22



Dimensions in mm (inches)

Certifications

- Ex II 3GD Ex nA nC IIC T4 Gc [Ta = -40C to +65C]
- Ex tc IIIC T130C Dc [Ta = -40C to +65C]
- Certificate numbers: IECEx SIR 14.0042X
Sira 14ATEX4097X
- ATEX Zones 2, 22
- IP66
- RoHS compliant

Features & Benefits

- L70 rated for >100,000 hours @ 25°C ambient
- 5 year full performance warranty
- Instant on/off operation
- Universal input (110 - 277V AC), 50/60Hz
- Superior colour rendering index compared to HPS, LPS, MV
- Mercury free
- Resistant to shock and vibration
- Temperature compensation technology for longer life
- Factory sealed

Application:

The SafeSite® LED area light represents the future of energy efficient facility illumination for hazardous areas worldwide. The ATEX / IECEx area lighting fixture consumes at least 50% less energy compared to traditional HID light sources, while reducing maintenance and carbon emissions. This light incorporates both cutting edge LED technology along with proprietary optics to achieve area lighting comparable with other traditional light sources.

Mechanical Information

Fixture Weight:	7.5kg (16.5lb)
Shipping Weight:	8.16kg (18.5lb)
Mounting:	Supplied with stirrup mounting bracket
Wiring:	Factory installed 3 meter 3 core cable

Electrical specifications

Operating Voltage:	110-277V AC, 50/60 Hz
Power Consumption:	See table
Operating Temp:	-40°C to +65°C (-40°F to +149°F)
Surge Protection:	1 kV line to line 2 kV line to ground
THD:	<20%
Power Factor:	> 0.9

Construction

Housing:	Copper free aluminum (A360)
Finish:	Superior dual coat finish Sealed polyester topcoat Chemical-resistant epoxy primer
Lens:	Toughened glass

Photometric Information

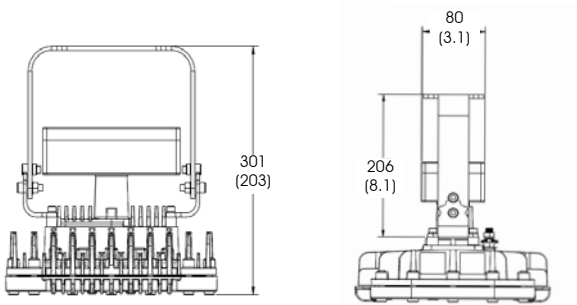
CRI:	75
CCT:	5000K (cool white) 4000K (neutral white)
Optics:	180° distribution 360° distribution
IES Files:	available at www.dialight.com

All values typical unless otherwise stated
All lumen values are typical (tolerance +/- 10%)



Patent Pending

SafeSite® LED Area Light - IECEx / ATEX Junction Box - Zone 2, 22



Dimensions in mm (inches)

Certifications

- Ex II 3GD Ex nA nC IIC T4 Gc [Ta = -40C to +65C]
- Ex tc IIIC T130C Dc [Ta = -40C to +65C]
- Certificate numbers: IECEx SIR 14.0042X
Sira 14ATEX4097X
- ATEX Zones 2, 22
- IP66
- RoHS compliant

Features & Benefits

- L70 rated for >100,000 hours @ 25°C ambient
- 5 year full performance warranty
- Instant on/off operation
- Universal input (110 - 277V AC), 50/60Hz
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- Mercury free
- Resistant to shock and vibration
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- Factory sealed

Application:

The SafeSite® LED area light represents the future of energy efficient facility illumination for hazardous areas worldwide. The ATEX / IECEx area lighting fixture consumes at least 50% less energy compared to traditional HID light sources, while reducing maintenance and carbon emissions. This light incorporates both cutting edge LED technology along with proprietary optics to achieve area lighting comparable with other traditional light sources.

Mechanical Information

Fixture Weight:	7.67kg (16.9lb)
Shipping Weight:	8.57kg (18.9lb)
Mounting:	Supplied with stirrup mounting bracket
Wiring:	Factory installed junction box

Electrical specifications

Operating Voltage:	110-277V AC, 50/60 Hz
Power Consumption:	See table
Operating Temp:	-40°C to +65°C (-40°F to +149°F)
Surge Protection:	1 kV line to line 2 kV line to ground
THD:	<20%
Power Factor:	> 0.9

Construction

Housing:	Powder coated A360 alum.
Finish:	Polyester / epoxy powder coat gray RAL 7040 for superior corrosion resistance
Lens:	Toughened glass

Photometric Information

CRI:	75
CCT:	5000K (cool white) 4000K (neutral white)
Optics:	180° and 360° distribution available
IES Files:	available at www.dialight.com

All values typical unless otherwise stated
All lumen values are typical (tolerance +/- 10%)

SafeSite® LED Area Light - ATEX / IECEx

Ordering Information

Part Number	Optical Pattern	Colour ¹	Lumens	Watts	Lumens Per Watt	Junction Box	Multi Area Light
IECEx / ATEX Zone 1, 21							
HZA0C2N	180	5000K (cool white)	2,200	21	105		
HZA1C2N	360	5000K (cool white)	2,200	21	105		
HZA2C2N	180	5000K (cool white)	3,600	38	95		
HZA3C2N	360	5000K (cool white)	4,000	38	105		
HZA4C2N	180	5000K (cool white)	4,600	47	97		
HZA5C2N	360	5000K (cool white)	5,100	47	108		
HZA8C2N	180	5000K (cool white)	5,600	58	97		
HZA9C2N	360	5000K (cool white)	6,000	58	103		
IECEx / ATEX Zone 1, 21 - Junction Box							
HZA8C2N	180	5000K (cool white)	5,600	58	96	•	
HZA9C2N	360	5000K (cool white)	6,000	58	103	•	
HZA8C2N-2	180	5000K (cool white)	11,200	116	96	•	2
HZA9C2N-2	360	5000K (cool white)	12,000	116	103	•	2
HZA8C2N-3	180	5000K (cool white)	16,800	174	96	•	3
HZA9C2N-3	360	5000K (cool white)	18,000	174	103	•	3
IECEx / ATEX Zone 2, 22							
HZB0C2N	180	5000K (cool white)	2,000	21	95		
HZB1C2N	360	5000K (cool white)	2,500	21	105		
IECEx / ATEX Zone 2, 22 - Junction Box							
HZB0C2N	180	5000K (cool white)	2,000	21	95	•	
HZB1C2N	360	5000K (cool white)	2,500	21	119	•	
HZB2C2N	180	5000K (cool white)	3,000	38	78	•	
HZB3C2N	360	5000K (cool white)	3,500	38	92	•	
HZB4C2N	180	5000K (cool white)	5,000	47	106	•	
HZB5C2N	360	5000K (cool white)	5,500	47	117	•	
HZB8C2N	180	5000K (cool white)	6,000	58	103	•	
HZB9C2N	360	5000K (cool white)	6,500	58	112	•	
HZBEC2N	180	5000K (cool white)	7,000	68	102	•	
HZBFC2N	360	5000K (cool white)	7,500	68	110	•	

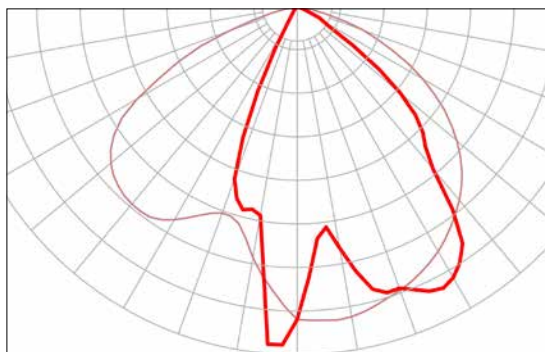
¹180° optical pattern models are optimized for a 45° mounting angle

Part numbers listed in the above table are 5000K (cool white) . For neutral white models replace the first **C** in the part code with an **N** Ex: HZA2**C**2N becomes HZA2**N**2N

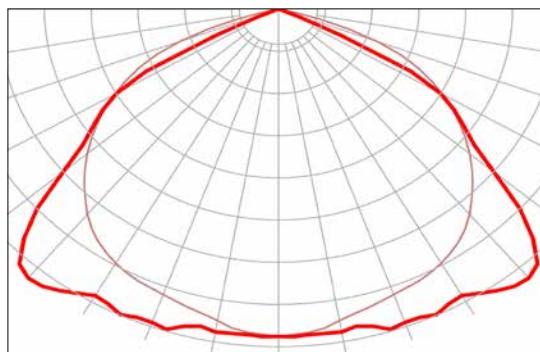
When changing to neutral white there is an approximate 7% drop in lumen output

Light Distribution Patterns

180° light distribution



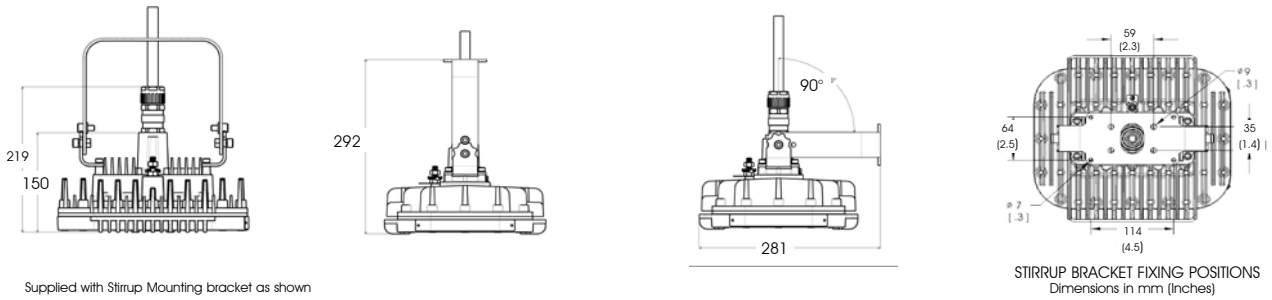
360° light distribution



SafeSite® LED Area Light - ATEX / IECEx

Dimensions with Stirrup Bracket

Zone 1

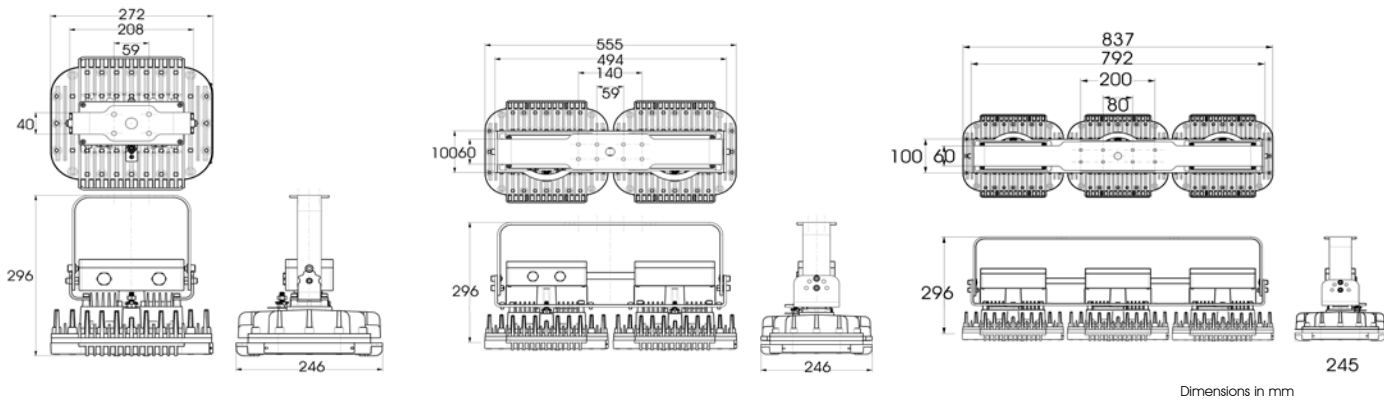


Zone 1 with Junction Box

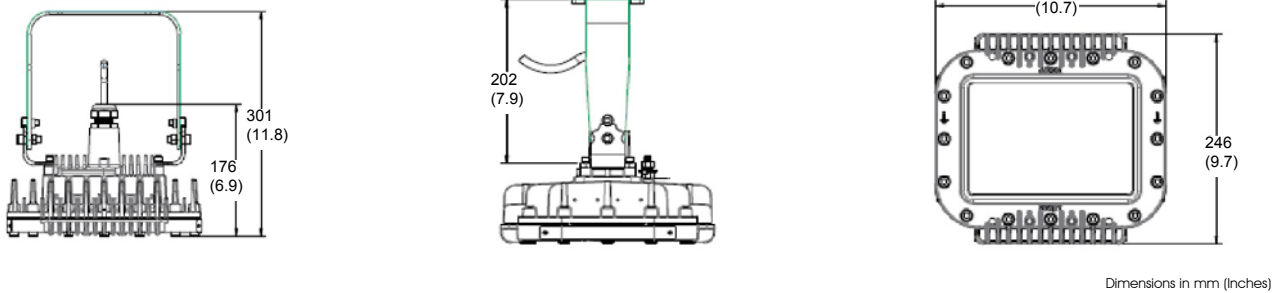
Junction Box

Multi Area Light x 2

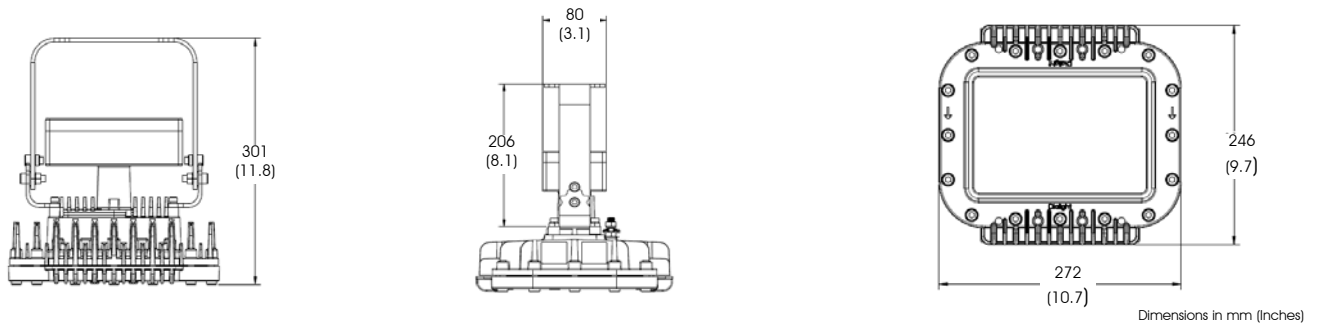
Multi Area Light x 3



Zone 2



Zone 2 with Junction Box



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